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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,330	08/16/2001	Frank Reil	99/G-002 CIP (5587*318)	5196

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,330

Applicant(s)

REIL, FRANK

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-18 and 29-31 is/are rejected.
- 7) ☒ Claim(s) 2 and 19-28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/505,790.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- ☐ Interview Summary (PTO-413) Paper No(s). ____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claims 7-18 each contain the trademark/trade names Sandoplast or Polysynthren.

Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe dyes and, accordingly, the identification/description is indefinite.

(b) Claim 13 recites "Solvent Blue 104" twice. The scope of the claim is confusing because it is not clear what, if any, the difference is between these two recitations. Clarification is requested. Similar questions arise in claim 15, which also recites the same claim language.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-5, and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Pinho et al. (US 2002/0056707).

Pinho et al. disclose composition comprising thermoplastic polymer as well as nonabsorbing dyes which are used in combination to produce black color. It is disclosed that the composition is transparent to laser light. Dyes such as blue, red, and yellow are combined to form black color. There is also disclosed a method for joining different types of materials by laser welding method wherein one material transmits the laser light to other material which absorbs the laser light and produces heat which allows the two different materials to bond (paragraphs 6, 15, 26, 28-29, and 32).

In light of the above, it is clear that Pinho et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinho et al. (US 2002/0056707) in view of Yamada et al. (U.S. 5,540,998).

The disclosure with respect to Pinho et al. in paragraph 4 above is incorporated here by reference.

The difference between Pinho et al. and the present claimed invention is the requirement in the claims of specific combination of dyes.

Pinho et al. disclose combining different color pigment or dye to form black color.

Yamada et al., which is drawn to coating composition, disclose combining yellow and violet pigment to form black color and that such combination has high reflective radiance in the region wherein the wavelength is from 780 nm and higher. Further, Yamada et al. disclose the combination of any of red, orange, yellow, green, blue and purple colors in order to produce such black color (col.3, line 61-col.4, line 9 and col.4, lines 10-27). Given that laser light has

wavelength which varies from 325 nm (helium-cadmium laser)-830 nm (semiconductor laser), it is clear that such combinations are translucent to laser light.

In light of the above and given Pinho et al.'s disclosure of the equivalence and interchangeability of pigment and dye, it therefore would have been obvious to one of ordinary skill in the art to use combination of dyes in Pinho et al. including yellow and violet as well as red, yellow and green in order to produce black thermoplastic composition which transmits laser light, and thereby arrive at the claimed invention.

Allowable Subject Matter

7. Claims 2 and 19-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2 and 19-28 would be allowable over the "closest" prior art if re-written in independent form for the following reasons.

Pinho et al. (US 2002/0056707) disclose composition comprising thermoplastic polymer as well as nonabsorbing dyes which are used in combination to produce black color. It is disclosed that the composition is transparent to laser light. Dyes such as blue, red, and yellow are combined to form black color. However, there is no disclosure or suggestion of using chinophthalone or anthrachinone dyes as presently claimed. Further, while Pinho et al. disclose the use of thermoplastic polymer that is polyolefin such as polyethylene or polypropylene, there is no disclosure of thermoplastic polymer that is cycloolefin copolymer, polystyrene, styrene-

acrylonitrile, polycarbonate, polyacrylate, polyester, or polyamide as presently claimed. Further, there is no disclosure or suggestion in Pinho et al. regarding the amounts of dye used.

Yamada et al. (U.S. 5,540,998) disclose composition comprising thermoplastic polymer as well as yellow and violet pigments which are used in combination to produce black color that is translucent to laser light. However, there is no disclosure of using nonabsorbing dyes as presently claimed. Thus, there is no disclosure or suggestion in Yamada et al. regarding the amounts of dye used as presently claimed.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DE 19960104 discloses thermoplastic molding materials containing at least two dyes so that the material has a dark color wherein the material transmits laser light. However, given the effective filing date, this reference cannot be used as prior art under any subsection of 35 USC 102.

Koshida et al. (US 2003/0039837) disclose black thermoplastic molding composition that comprises dye combination made from nonabsorbing dyes that produce composition, which is translucent to laser light. There is also disclosed a laser welding method wherein resin part for transmitting black color and resin part for absorbing black colorant which are laser welded together. However, given the effective filing date, this reference cannot be used as prior art under any subsection of 35 USC 102.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho
Examiner
Art Unit 1714

CS
April 1, 2003